

**Notice of Allowability**

Application No.

10/522,181

Examiner

Wasseem H. Hamdan

Applicant(s)

MORIMOTO ET AL.

Art Unit

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**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 01/24/05 and Examiner's Amendmend on 03/09/2006.
2. ☒ The allowed claim(s) is/are 7-12.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
  1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date 01/24/2005
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☒ Other See Continuation Sheet.

Continuation of Attachment(s) 9. Other: English Translation to JP 2002-160412 and JP2000-071582 .

### EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Robert B. Murray (registration No. 22, 980) on 03/09/2006.

The application has been amended as follows:

a. **Title:** the title has been replaced with -- NARROWING THE OPERATING RANGE OF THE NOZZLE HEAD IN A PRINTING SYSTEM AND PRINTING METHOD -- .

b. **Claims:**

i. **Claim 7:**

(1) Line 3, "in both a main scanning direction and an auxiliary scanning direction", has been replaced with -- in both an operation of the nozzle head in a main scanning direction (X direction) and an operation of the carriage in the auxiliary direction (Y direction) which are independent of each other -- ; and

(2) Line 9, "extracted", has been replaced with -- decomposed -- .

**ii. claim 12:**

- (1) Line 3, “in both a main scanning direction and an auxiliary scanning direction”, has been replaced with -- in both an operation of the nozzle head in a main scanning direction (X direction) and an operation of the carriage in the auxiliary direction (Y direction) which are independent of each other -- ; and
- (2) line 9, “extracted”, has been replaced with -- decomposed -- .

b. **Abstract:** line 1, “comprising” has been replaced with -- including -- .

c. **Drawings:** The following changes to the drawings have been approved by the examiner and agreed upon by applicant: Fig. 1:

- i. The descriptive legend -- an external design device -- will be inserted inside box 4;
- ii. The descriptive legend -- print controller -- will be inserted inside box 6; and
- iii. The descriptive legend -- printer -- will be inserted inside box 8.

In order to avoid abandonment of the application, applicant must make these above agreed upon drawing changes.

***Examiner's Statement Of Reason For Allowance***

2. The following is an examiner's statement of reasons for allowance:

Claims 7-12 are allowed.

Regarding claim 7, the prior art of record does not teach all the combined elements and/or components for a printing system, including a control means for making the carriage and the nozzle head scan only within the blocks decomposed and print the print data within the blocks extracted.

Regarding claim 12, the prior art of record does not teach all the combined steps for a printing method using a printer, including the steps of a step for making the carriage and the nozzle head scan only within the blocks decomposed and print the print data within the blocks extracted.

***Conclusion***

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art of record does not teach all the combined elements, components and steps as discussed above in the "examiner's statement of reasons for allowance". In order to expedite prosecution of the case, the examiner's amendment was necessary in order to overcome the prior art.

4. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

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fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wasseem H. Hamdan whose telephone number is (571) 272-2166. The examiner can normally be reached on M-F (first Friday off) 6:30 AM- 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew H. Hirshfeld can be reached on (571) 272-2168. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Wasseem H. Hamdan

March 9, 2006



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